

## Health Alert - July 19, 2006

### *Vibrio parahaemolyticus* infections associated with raw shellfish

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From January-July 19, 2006, the Department of Health has received reports of 47 confirmed or suspected cases of diarrheal illness caused by *Vibrio parahaemolyticus* (VP), a marked increase compared with past years. We have also received reports from several other states and provinces regarding VP infections that appear to be associated with consumption of shellfish harvested in the Pacific Northwest. Healthcare providers should be familiar with the risk factors associated with this diarrheal illness as well as the specific methods needed to detect VP in stool specimens. *Vibrio parahaemolyticus* infection is a notifiable condition in Washington.

*Vibrio parahaemolyticus* are salt-tolerant, gram-negative bacteria commonly found in seawater; levels are highest in warm climates or during the warmer months of the year in colder climates. In Washington about 20 cases of VP gastroenteritis are reported every year and most infections are associated with consumption of raw or undercooked shellfish, e.g., shrimp, oysters, clams.

#### **Clinical features of *Vibrio parahaemolyticus***

*Vibrio parahaemolyticus* causes acute gastroenteritis with explosive, watery stools accompanied by fever, chills, abdominal cramping, nausea and vomiting. The symptoms usually occur within 24 hours of exposure and in most people, the illness is self-limited, lasting about three days. Serious wound infections or bacteremia are less common and usually associated with exposures in patients who have chronic liver disease or immunosuppression. Few patients with gastroenteritis require hospitalization and death caused by VP is very rare.

#### **Diagnosis of *Vibrio parahaemolyticus***

The diagnostic test of choice is isolation of VP from the stool, blood or tissue. There are no rapid diagnostic tests for VP and clinicians should suspect VP in patients with diarrheal illness and recent consumption of raw or undercooked fish, or in patients with wound infections and recent exposure to seawater. ***Specific testing for VP must be requested from your microbiology lab because this organism will not grow in media used for isolation of most enteric pathogens and requires selective thiosulfate citrate bile salts sucrose (TCBS) agar.***

#### **Treatment of *Vibrio parahaemolyticus***

Antimicrobial treatment for VP gastroenteritis is usually not necessary as the disease is self-limited. More serious infections may require oral or parenteral rehydration and treatment with doxycycline, tetracycline, fluoroquinolones or cefotaxime for children and pregnant women.

#### **Recommendations for patients**

Patients who have chronic liver disease or immune dysfunction should be aware of the dangers associated with the consumption of many raw or undercooked foods, including shellfish.

For additional information or to report a confirmed or suspected infection with *Vibrio parahaemolyticus*, please contact your local health department (contact information available at <http://www.doh.wa.gov/LHJMap/LHJMap.htm>) or the Washington State Department of Health Communicable Disease Epidemiology Section @ 206.418.5500 or 877.539.4344.